

HFUS 3 BCU 292200.

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 150

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 29 MAY 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 28/2100 TO 29/2100Z: SOLAR ACTIVITY WAS LOW. REGION 4500 (S12E35) PRODUCED A C2/0N EVENT AT 29/0021Z WITH 390 SFU RADIO BURST AT 245 MHZ. THIS REGION GREW IN AREA, SPOT NUMBER, AND LONGITUDINAL EXTENT; AND REMAINED AN EHO WHITE LIGHT CLASSIFICATION. THIS REGION ALSO GREATLY ENHANCED THE EAST-WEST SCAN. TWO NEW REGIONS WERE ASSIGNED: REGION 4505 (S19E18) AND 4506 (S23E68) WERE BOTH ALPHA-TYPES. REGION 4506 PRODUCED TWO SUB-FLARES WITHOUT X-RAY ASSOCIATION. ERUPTIVE PROMINENCES AT THE SOUTH-EAST LIMB (S33E90 AT 29/1535Z) EXTENDED TO .10 RADII AND LASTED OVER AN HOUR. THESE MAY BE ASSOCIATED WITH NEW REGION 4506 BUT ARE MORE LIKELY FURTHER SOUTH-EAST OF THIS SIMPLE GROUP. NO RETURNING REGION OF CONSEQUENCE WAS NEAR THIS LOCATION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW. REGION 4492 (S11W74) AND 4500 BOTH PROVIDE A VERY SLIGHT CHANCE OF MODERATE LEVELS. RETURNING REGION 4480 (N02, CAR 164) IS EXPECTED AT 1/0700Z. IT PRODUCED ONE M-LEVEL X-RAY AND 5 SUB-FLARE EVENTS DURING ITS LAST ROTATION.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 28/2100Z TO 29/2100Z: GEOMAGNETIC ACTIVITY WAS UNSETTLED TO ACTIVE. BRIEF STORM LEVELS WERE REPORTED AT HIGH LATITUDES. A THREE DEGREE LONG FILAMENT DISAPPEARED FROM REGION 4499 (S17W21) AT 29/1822Z.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE ACTIVE. STORM LEVELS ARE EXPECTED AT HIGH LATITUDES ON THE FIRST AND THIRD DAYS (30 MAY/1 JUN). THESE DISTURBANCES ARE FORECAST DUE TO DISAPPEARING FILAMENTS ON 26 MAY AND 29 MAY.

III. EVENT PROBABILITIES 30 MAY-01 JUN

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 MAY 118

PREDICTED 30 MAY-01 JUN 120/125/130

90 DAY MEAN 29 MAY 127

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 28 MAY 008/012

ESTIMATED AFR/AP 29 MAY 014/015

PREDICTED AFR/AP 30 MAY-01 JUN 020/025-014/015-023/025

SOLTERWARN

BT